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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,724	04/01/2004	Arul Thangaraj	15467US02	1029

7590 10/15/2010  
Christopher C. Winslade  
McAndrews, Held & Malloy, LTD.  
34th Floor  
500 West Madison Street  
Chicago, IL 60661

EXAMINER
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HOLDER, ANNER N

ART UNIT	PAPER NUMBER
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2483

MAIL DATE	DELIVERY MODE
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10/15/2010

PAPER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/816,724  
Filing Date: April 01, 2004  
Appellant(s): THANGARAJ ET AL.

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Mirut P. Dalal  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 07/16/10 appealing from the Office action mailed 08/14/10.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-4, 6, 7, 10-15, 19-22, 24, 25, and 28 are rejected under 35 U.S.C. 103 as being unpatentable over Malladi U.S. 5,815,206 in view of Sugiyama et al. U.S. 2003/0009722.

Claims 8, 9, 16-18, and 26-27 are rejected under 35 U.S.C. 103 as being unpatentable over Malladi U.S. 5,815,206 in view of Sugiyama et al. U.S. 2003/0009722 further in view of Forecast et al. U.S. 7,096,481.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

5,815,206	Malladi	9-1998
7,096,481	Forecast et al.	8-2006
2003/0009722	Sugiyama et al.	1-2003

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-4, 6-7, 10-15, 19-22, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malladi et al. (Malladi) US 5,815,206 in view of Sugiyama et al. US 2003/0009722 A1.
2. As to claim 1, Malladi teaches a method for decoding video data, [Abstract; Col. 1 Lines 24-28; Col. 2 Lines 61-63; Fig. 4] said method comprising: writing one or more start codes to a start code table; [Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 14-66; col. 17 lines 21-55] and writing presentation time information to the start code table; [Col. 15 Lines 34-39, 54-56] and wherein the start code table writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words. [col. 15 lines 14-66; col. 17 lines 21-55 – writes the start code to the data it represents]

Sugiyama teaches the use of data words and the use of start codes within the data word in the start code table. [fig. 14; ¶ 0052; ¶ 0277; a header of an MPEG stream according to a first embodiment; a stream that is output from the selector 306 is temporally written to a memory. The VLC controls the addresses of the stream written in the memory to convert the stream into an MPEG stream.]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sugiyama with the decoder of Malladi to improve efficiency of coding and display of data.

3. As to claim 2, Malladi (modified by Sugiyama) teaches presentation time information comprises a presentation time stamp. [Malladi - Col. 15 Lines 34-39, 54-56]

4. As to claim 3, Malladi (modified by Sugiyama) teaches writing decoding time information to the start code table. [Malladi - Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56]

5. As to claim 4, Malladi (modified by Sugiyama) teaches the decoding time information comprises a decoding time stamp. [Malladi - Col. 15 Lines 34-39, 45-46, 54-56]

6. As to claim 6, Malladi (modified by Sugiyama) teaches the plurality of start codes comprises a slice start code and a non-slice start code. [Malladi – Col. 10; Lines 63-67; Col. 11 Lines 3-9; Fig. 1B]

7. As to claim 7, Malladi (modified by Sugiyama) teaches writing a command to the start code table [Malladi - Fig. 4; communicates with start code table writing commands; col. 15 lines 31-53; col. 17 lines 21-41 (emphasis lines 27-29)]

8. As to claim 10, Malladi (modified by Sugiyama) teaches A circuit for decoding video data, [Malladi – Abstract; Col. 1 Lines 24-28; Col. 2 Lines 61-63; Fig. 4] said circuit comprising: a start code table for storing start codes, the start code table comprising a plurality of data words; and a video transport processor [Malladi – Fig. 4

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(417)] for writing a plurality of start codes [Malladi - Col. 15 Lines 34-39, 45-46, 54-56] to a particular data word in the start code table. [Sugiyama - fig. 14; ¶ 0052; ¶ 0277; a header of an MPEG stream according to a first embodiment; a stream that is output from the selector 306 is temporally written to a memory. The VLC controls the addresses of the stream written in the memory to convert the stream into an MPEG stream.]

9. As to claim 11, Malladi (modified by Sugiyama) teaches the plurality of start codes comprises a slice start code and a non-slice start code. [Malladi – Col. 10 Lines 63-67; Col. 11 Lines 3-9; Fig. 1B]

10. As to claim 12, Malladi (modified by Sugiyama) teaches the video transport processor [Malladi – Fig. 4 (417)] writes presentation time information to the start code table. [Malladi – Col. 15 Lines 34-39, 54-56]

As to claim 13, Malladi (modified by Sugiyama) teaches the presentation time information comprises a presentation time stamp. [Malladi – Col. 15 Lines 34-39, 54-56]

11. As to claim 14, Malladi (modified by Sugiyama) teaches the video transport processor writes decoding time information to the start code table. [Malladi – Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56]

12. As to claim 15, Malladi (modified by Sugiyama) teaches the decoding time information comprises a decoding time stamp. [Malladi – Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56]

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13. As to claim 19, see rejection of claim 1, except this is a claim to an article of manufacture with the same limitations as claim 1.

14. As to claim 20, see rejection of claim 2, except this is a claim to an article of manufacture with the same limitations as claim 2.

15. As to claim 21, see rejection of claim 3, except this is a claim to an article of manufacture with the same limitations as claim 3.

16. As to claim 22, see rejection of claim 4, except this is a claim to an article of manufacture with the same limitations as claim 4.

17. As to claim 24, see rejection of claim 6, except this is a claim to an article of manufacture with the same limitations as claim 6.

18. As to claim 25, see rejection of claim 7, except this is a claim to an article of manufacture with the same limitations as claim 7.

19. As to claim 28, Malladi (modified by Sugiyama) teaches the plurality of start codes written to the particular data word comprise a start code for a slice group and a start code for a picture. [col. 8 lines 15-42; col. 15 lines 14-66; col. 17 lines 21-55 – writes the start code to the data it represents; fig. 14; ¶ 0052; ¶ 0277; a header of an MPEG stream according to a first embodiment; a stream that is output from the selector 306 is temporally written to a memory. The VLC controls the addresses of the stream written in the memory to convert the stream into an MPEG stream.]



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20. Claims 8-9, 16-18, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malladi et al. (Malladi) US 5,815,206 in view of Sugiyama et al. US 2003/0009722 A1 further in view of Forecast et al. (Forecast) US 7,096,481 B1.

21. As to claim 8, Malladi (modified by Sugiyama) teaches the limitations of claim 7, writing a to the start code table. [Malladi – Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56]

Malladi (modified by Sugiyama) does not specifically teach a reference clock offset.

Forecast teaches a reference clock offset. [Fig. 40; Col. 20 Lines 7-9, 23-26]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings Forecast with the decoding device of Malladi modified by Sugiyama, allowing for correction in timing through the use of the clock offset.

22. As to claim 9, Malladi (modified by Sugiyama and Forecast) teaches the command Malladi - Fig. 4; communicates with start code table writing commands is obvious] and the reference clock offset [Forecast - Fig. 40; Col. 20 Lines 7-9, 23-26] are written to another particular one of the plurality of data words. [Sugiyama - fig. 14; ¶ 0052; ¶ 0277; a header of an MPEG stream according to a first embodiment; a stream that is output from the selector 306 is temporally written to a memory. The VLC controls the addresses of the stream written in the memory to convert the stream into an MPEG stream.]

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23. As to claim 16, see rejection of claim 8, except this is a claim to a circuit with the same limitations as claim 8.

24. As to claim 17, see rejection of claim 7, except this is a claim to a circuit with the same limitations as claim 7.

25. As to claim 18, see rejection of claim 9, except this is a claim to a circuit with the same limitations as claim 9.

26. As to claim 26, see rejection of claim 8, except this is a claim to an article of manufacture with the same limitations as claim 8.

27. As to claim 27, see rejection of claim 9, except this is an article of manufacture to a circuit with the same limitations as claim 9.

### **(10) Response to Argument**

#### **VII. Argument: Claims 1, 10, and 19 are not obvious from Malladi and Sugiyama**

Regarding Applicant's arguments the Examiner respectfully disagrees. Malladi taken in combination with Sugiyama teaches writing a code to a data word. [Malladi - fig. 4; col. 15 lines 14-66; col. 17 lines 21-55 – writes the start code to the data it represents; Sugiyama - fig. 14; ¶ 0052; ¶ 0122; ¶ 0277; a header of an MPEG stream according to a first embodiment; a stream that is output from the selector 306 is temporally written to a memory. The VLC controls the addresses of the stream written in the memory to convert the stream into an MPEG stream] A data word is fixed sized group of bits processed as a single unit. Malladi discloses the PES header is stored (written) in the start table. [col. 15 lines 31-42; fig. 4; fig. 1A] The PES header is a fixes

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sized group of bits thus is considered a data word. Malladi teaches a start code is written to a particular PES header (data word) [fig. 4; fig. 1A; col. 15 lines 31-53] reading upon the claim limitation as presented by the Applicant.

VIII. Argument: Claims 6, 11, and 24 under 35 U.S.C.103(A) should be reversed

The Examiner respectfully disagrees with the Applicant's remarks. Malladi discloses both a start code for a slice and a picture (non-slice) [col. 8 lines 15-42; col. 10 lines 63-67; col. 11 lines 3-9] The information regarding the start codes for both the pictures and slices are contained within the header which are apart of the bit stream which is processed and the information is written to the start code table and memory included there in the data words. [Malladi – fig. 4; Col. 10; Lines 63-67; Col. 11 Lines 3-9; Fig. 1B]

IX. Argument – The rejection of claims 7 under 35 U.S.C. 103 (A) should be reversed

Malladi taken in combination with Sugiyama teaches writing a command to the start code table [Malladi - Fig. 4; communicates with start code table writing commands; col. 15 lines 31-53; col. 17 lines 21-41 (emphasis lines 27-29)] The system communicates with the start code table of Malladi - fig. 4. The system identifies the start codes and stores the start codes. [Malladi - col. 15 lines 31-59] As to writing commands Applicant's specification discloses the commands are information associated with the non-slice start code. [Applicant specification - ¶ 0061; fig. 4A]

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Anner Holder/

Examiner, Art Unit 2621

Conferees:

/Mehrdad Dastouri/

Supervisory Patent Examiner, Art Unit 2621

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2484